

CLAIMS

1. A comparison optical system comprising:
two macroscopes,
a bridge which couples the macroscopes mechanically and optically to one another,
an XYZ stage associated to each macroscope for placing a sample thereon,
an illumination system for specimens placed on the XYZ stage, and
an attachment device for the illumination system is connected to each macroscope,
wherein each attachment device has several movable arms and an adjustable
holder for a light source.
2. The comparison optical system as defined in Claim 1, wherein each macroscope
encompasses a rotatable ring to which a first arm of the several movable arms is attached.
3. The comparison optical system as defined in Claim 2, wherein the rotatable ring is
equipped with a scale and a locking screw immobilizes the rotatable ring.
4. The comparison optical system as defined in Claim 2, wherein the first arm has an
end, at the end of the first arm, opposite the rotatable ring, a first clamping apparatus is
provided, in which a second arm, equipped with a scale, is guided.
5. The comparison optical system as defined in Claim 4, wherein there is provided
on the second arm, opposite the first clamping apparatus, a second clamping apparatus in
which the second arm and a third arm are guidable perpendicular to one another; and a
holder for an illumination system is mounted opposite the second clamping apparatus.

6. The comparison optical system as defined in Claim 5, wherein the holder is rotatable about an axis perpendicular to a rotation axis of the rotatable ring and perpendicular to the third arm.
7. The comparison optical system as defined in Claim 6, wherein the holder is equipped with a scale.
8. The comparison optical system as defined in claim 1, wherein a PC, is associated with the comparison optical system.
9. The comparison optical system as defined in Claim 8, wherein in the PC optimum illumination conditions established for the examination, based on the values of various scales, are stored in a file and the values of the various scales are retrieved together with the image data of the specimens to be compared.
10. The comparison optical system as defined in Claim 1, wherein the light source is constituted by the exit end of a light guide, the light incidence onto the specimens being determined by the values on the scale on the attachment element.
11. The comparison optical system as defined in Claim 10, wherein the light source is connected to the PC and receives control signals therefrom.

12. The comparison optical system as defined in Claim 1, wherein the positions of the XYZ stages, the intensity of the light source, and the position of a revolving nosepiece are stored in the file provided in the PC; and those values are retrieved from the file in order to adjust the macroscope.